This work is divided into three major sections. The first, entitled "The Reaction of the Body to Infection," stresses the dynamic concept of the host's reaction to an invasion of organisms as "a battle full of surprises: both sides are able to alter tactics"; special chapters are devoted to syphilis, tuberculosis, and typhoid fever. The second, "Diseases Due to Breakdown of Physiological Mechanisms," is of great value for its unbiased view of arteriosclerosis and a comprehensible discussion of the sequence of events following various types of heart pathology, while the third, "Tumours," contains a particularly challenging chapter on the possible aetiology of cancer as seen in the light of experimental carcinogenesis.

The avowed purpose of this book is to make pathology intelligible to the aspiring student; its excellent camera lucida drawings contribute no small part to this end. Dr. Cater attempts to present a work which will disperse the all too prevalent impression that "pathology is a science of dead things—a static subject; a science whose high altar is the marble slab of the postmortem room; a science whose high devotees haunt dusty museums, gazing at bottled specimens." This reviewer would respectfully submit that the author has admirably attained his goal.

J. C. C.

DISEASES OF THE RETINA. 2d Ed. By Herman Elwyn. New York, The Blakiston Co., Inc., 1953. xiv + 713 pp. \$12.00.

The second edition of Elwyn's excellent book, *Diseases of the Retina*, follows in general the text of the first edition. The chapter on Diabetic Changes in the Retina has been enlarged and several illustrations added. Expansion of the chapter on Heredodegenerative Changes and that on The Clinical Picture of Retinitis Pigmentosa gives more information on these subjects.

A chapter on tuberculosis, covering allergy and immunity in general, has been added. Two other new chapters have been introduced, that on Retrolental Fibroplasia and one on Sarcoidosis of the Retina. The new illustrations on Disciform Degeneration of the Macula, Amaurotic Family Idiocy, and Gyrate Atrophy of the Retina increase the value of the text.

A general lengthening of the bibliography brings the book up to date for reference, and this fact, together with the improved text, makes this fascinating study of the innermost layer of the eye most valuable. "Elwyn" is a book needed by every ophthalmologist.

EUGENE M. BLAKE

THE EFFECT OF ACTH AND CORTISONE UPON INFECTION AND RESISTANCE. Gregory Shwartzman, Ed. New York Academy of Medicine, Section on Microbiology, Symposium No. 6, March 27-28, 1952. New York, Columbia University Press, 1953. v + 204 pp. \$5.50.

This book is a collection of thirteen papers presented at a meeting of the Section on Microbiology of the New York Academy of Medicine nearly two years ago. Although most of the articles deal with particular phases of

immunity or infection as influenced by adrenal steroids, some describe biochemical or anatomical studies that are only indirectly related to the subject of the symposium. Each article is by an acknowledged authority; most consist of a review of published reports up to the time of the meeting. Liberally interspersed are interpretations and criticisms, often on the basis of the investigative findings of the writer himself, and the summaries usually achieve a point of view or approach to the particular problem which is more valuable than the assorted facts alone could ever be.

The introductory chapter on "Some General Considerations Concerning the Role of the Adrenal Cortex in Intermediary Metabolism" by Frank Engel is a superb discussion of the importance of endocrine interrelationships in maintaining homeostasis; he cautions immunologists, bacteriologists, and virologists against the fallacy of equating the effects of ACTH or cortisone and "normal" adrenal function, emphasizing further the necessity of defining "normal" endocrine function in terms of internal and external environment at the time measurements are made. Citing classic examples of previous error resulting from failure to recognize that biochemical or metabolic changes after ablation of a single gland or injection of a single hormone cannot be interpreted solely in terms of the hormone in question, Engel warns that the Law of Parsimony usually does not apply in interpreting the results of any experiment which involves alteration in the delicate endocrine balance of the entire organism. Lastly, he pleads for wider recognition of so-called "permissive" hormone action, a concept which has been so beautifully illustrated in his own and in Ingle's classic experiments on the metabolic alterations produced by stress.

The appearance of these papers in print nearly two years after their delivery might lead one to fear that the material would be outdated. However, the results of so many "personal communications," "unpublished results," or "preliminary experiments" were described at the symposium that the details of much of the work mentioned have been published in medical journals only recently and some are still unpublished. Furthermore, the basic concepts and suggestions of pathways for further investigations that are contained or implied in this symposium at least equal and will eventually far exceed in value the factual content.

IVAN L. BENNETT, JR.

BIOCHEMICAL PREPARATIONS, Vol. 3. Esmond E. Snell, Ed. New York, John Wiley and Sons, Inc., 1953. viii + 128 pp. \$3.50.

Volume 3 of this series contains descriptions of the preparation of the following substances: crystalline muscle phosphorylase (B. Illingworth and G. T. Cori); ribonuclease (M. Kunitz); diphosphopyridine nucleotide (A. Kornberg and W. E. Pricer, Jr.); triphosphopyridine nucleotide (A. Kornberg and H. L. Horecker); pyridoxamine phosphate and pyridoxal phosphate (E. A. Peterson, H. A. Sober, and A. Meister); protoporphyrin dimethyl ester (V. G. Ramsey); d-isocitric acid (H. B. Vickery); dlisocitric acid lactone (H. P. Kato and S. R. Dickman); dihydroxyfumaric